

We claim:

1. A heat insulating wall including vacuum insulation members, comprising:

a first panel;

a first heat insulating material mounted on said first panel;

one or more vacuum insulation members arranged on said first heat insulating material;

a second heat insulating material mounted on said vacuum insulation member^s;

a second panel mounted on said second heat insulating member; and

a filler insulating member for filling areas surrounded by said first heat insulating material, said vacuum insulation member and said second heat insulating material between said first and said second panels;

wherein the thickness of said first and second heat insulating materials are set to a predetermined size.

Sub 192. The heat insulating wall according to claim 1, wherein said first heat insulating material and said second heat insulating material are plate-shaped.

3. The heat insulating wall according to claim 1, wherein said first heat insulating material and said second heat insulating material are pillar-shaped.

4. The heat insulating wall according to claim 1, wherein said filler insulating member is formed of expanding plastic foam.

5. The heat insulating wall according to claim 1, wherein said filler insulating member is formed of non-expanding plastic foam, and seal portions of said vacuum insulation member are supported by said filler insulating member.

6. The heat insulating wall according to claim 5, wherein said filler insulating member comprises a first filler insulating member and a second filler insulating member, and said seal portions of said vacuum insulation member are sandwiched between said first filler insulating member and said second filler insulating member.

7. The heat insulating wall according to claim 1, wherein said filler insulating member comprises a seal support means for supporting seal portions of said vacuum insulation member.

8. The heat insulating wall according to claim 7, wherein said seal support means comprises a first seal support portion and a second seal support portion for sandwiching said seal portion of said vacuum insulation member.

9. The heat insulating wall according to claim 7, wherein

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said seal support means is a concave portion formed to a seal support portion to which said seal portion of said vacuum insulation member may be inserted.

10. A heat insulating wall including one or more vacuum insulation members, comprising:

a first panel, a second panel, and one or more vacuum insulation member units arranged between said first panel and said second panel;

wherein said vacuum insulation member units each include a first storage portion and a second storage portion equipped with fitting portions for positioning and fitting said vacuum insulation member; and

the distance from said first panel to the bottom of said fitting portion of said first storage portion, and the distance from said second panel to the bottom of said fitting portion of said second storage portion are both set to a predetermined size.

a Sub 11. The heat insulating wall according to ~~claim 10~~ claim 10, wherein said predetermined size is set to be equal to a depth of a base hole for inserting a fastening member plus an appropriate clearance.

12. A method of manufacturing a heat insulating wall including one or more vacuum insulation members, comprising:

a first heat insulating material positioning step of mounting a first heat insulating material onto a first panel;

a second heat insulating material positioning step of mounting a second heat insulating material onto a second panel;

a vacuum insulation member positioning step of mounting vacuum insulation members between said first and second heat insulating materials; and

a filling step of positioning a filler insulating member in the space formed between said first and second heat insulating materials;

wherein said vacuum insulation members are arranged with appropriate intervals therebetween so that proximal vacuum insulation members do not come into contact with each other, and the thickness of said first and second heat insulating materials are set to a predetermined size.

13. The method of manufacturing a heat insulating wall according to claim 12, wherein during said filling step, said filler insulating member is formed by injecting and expanding liquid-plastic in said space.

Sub 14. The method of manufacturing a heat insulating wall according to claim 12, wherein said filler insulating member is formed of non-expanding plastic foam, and during said filling step, said filler insulating member is positioned so as to sandwich a seal portion of said vacuum insulation member.

15. The method of manufacturing a heat insulating wall according to claim 12, wherein said first heat insulating material and said second heat insulating material each include a fitting portion for storing said vacuum insulation member, and during said vacuum insulation member positioning step, said vacuum insulation member is stored to said fitting portion formed to said first and second heat insulating materials.

16. The method of manufacturing a heat insulating wall according to claim 12, wherein said vacuum insulation member is sandwiched between said first and second heat insulating materials before being mounted on said first panel.

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